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ABSTRACT

In a continuation of research on the technical labor force that was initiated in 1990 at a large northeastern university, professionalism among technical workers was examined from an emic perspective. (Emics are conceptual strategies that explain phenomena in terms meaningful to the people being studied, whereas etics explain phenomena in terms meaningful to the observers.) The research centered on a series of coordinated ethnographic studies of technical occupations. Each study involved 6-12 months of field work in the form of a participant observation and unstructured interviews on a variety of subjects tailored to the occupation under investigation. The field notes from each study were then systematically searched for explicit emically based references to professionalism. The analysis focused on three aspects of professionalism: expertise, attitude, and presentation. In general, the technicians' talk of professionalism did not reflect a concern for power or status but rather an insistence that their expertise and contribution to the work process be respected within the professional division of labor. It was concluded that substantial discrepancies do in fact exist between etic and emic interpretations of professional rhetoric and that etically based conceptions of "profession" present only a partial and, at least in the case of professional rhetoric, inaccurate understanding of the social phenomenon of rhetoric. (Contains 52 references.) (MN)

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Toward an Emic Understanding of Professionalism among Technical Workers

by

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by Bonalyn J. Nelsen and Stephen R. Barley
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Introduction

The sociology of work and occupations has long been dominated by the notion that a society becomes professionalized as it becomes industrialized (Goode 1960). Support for this assertion traditionally has been drawn from the burgeoning ranks of white collar workers, whose educational attainment and occupational cleanliness (Hughes 1958) resonates with images of professionalism based on archetypes of American medicine and law. But in the early 1950s, this idea was severely tested when a handful of researchers drew on evidence gathered from sources as diverse as service workers (Caplow 1954), factory operatives (Foote 1953), and manual laborers in the construction trades (Stinchcombe 1959) to argue that an ideology of professionalism was diffusing throughout the labor force as a whole. Foote was particularly enthusiastic about this shift, which he predicted would profoundly alter work and work relations: work processes would transform from segmented, fractionated tasks like those associated with the assembly lines he studied and would become collaborative operations guided by shared skills and knowledge. While hierarchies would continue to dominate the organizational landscape, the work relations within them would grow collegial as differences of formal status were traded for those of functional expertise (1953, 371).

These ideas were greeted with little enthusiasm from sociologists favoring more traditional conceptions of professionalism. Harold Wilensky spoke for many when, in his now-famous article entitled "The Professionalism of Everyone?" he dismissed the notion of widespread professionalism as "a bit of sociological romance" inspired by a methodological infatuation with "loose criteria" (1964, 156). The claim that service workers and factory operatives would eventually acquire an ideology of professionalism was, he suggested, absurd and could be advanced only by eschewing ". . . the traditional model of professionalism which emphasizes autonomous expertise and the service ideal" (137). Wilensky feared that a more expansive application of the concept would result in the indiscriminate labeling of all work as professional and would consequently blur differences between occupations in the division of labor. In essence, all work would become

professional in theory, but not in fact. To avoid this, he warned social scientists not to "*mistake the rhetoric of professionalism for its substance or to ignore the distinctive features of professional life that sort out the established professions from new and different organizational forms*" (157, emphasis added).

To understand this reaction, one must realize that Wilensky was advocating a referential approach to professionalism — that is, one driven by the notion that social phenomena can be usefully examined against an ideal type. This perspective was not particularly new to the analysis of professional occupations. In fact, in making his statement, Wilensky drew on a large body of sociological theory that attempted to characterize a profession as a distinctive ideal type: an elite occupational form characterized by power, status, and prestige (Goode 1960). Since Flexner introduced the term in 1915, researchers had sought to define professions by selecting occupations considered to closely approximate this ideal — typically, American medicine and law — and detailing the differentiating criteria or "traits" which seemed singular to them: credentials, licenses, professional organizations, codes of ethics, and so on (Turner and Hodge 1970). For the most part, these traits emphasized the material conditions necessary for an occupation to merit professional status, although attitudinal characteristics such as "altruism" and "community orientation" were also included (e.g., see Carr-Saunders and Wilson 1933; Cogan 1953; Greenwood 1957; Barber 1963; Millerson 1964). Simply put, the idea was that once these criteria were achieved, an occupation deserved the status and recognition of a profession. As a corollary, occupations that failed to exhibit the characteristics denotive of this status were not deemed professional.

When seen from this perspective, Wilensky's response becomes relatively easy to interpret. The suggestion that service workers and factory operatives were becoming professional proved objectionable not only because it violated traditional norms of class and status (although one suspects this also played a role), but also because it involved the application of the term to occupations that displayed few of the structural characteristics used to define professions. Barbers, bellboys, and assembly line workers, for instance, obviously exhibited few of the attributes that distinguish medicine, law, and other established professions. How, then, could Foote and his colleagues have arrived at their conclusion?

Wilensky identified as the culprit the subjective meanings, or "rhetoric," given to the term "profession" by occupation members. He reasoned that because many occupations coveted the status and prestige conferred by the title of "profession," subjects were likely to use the term to describe themselves and their work even if their occupation did not resemble the ideal type. Consequently, researchers who naïvely attended to this talk rather than to structural attributes considered denotive of professionalism — "the distinctive features of professional life" — could easily be led to conclude that virtually any occupation was indeed becoming a profession. And this, he decided, was precisely what had led Foote astray. Hence, Wilensky sternly warned against examining lay usage of the term, which for all intents and purposes meant that the term "professional" should hold only those meanings sociologists themselves attributed to it.

The decades following Wilensky's admonition have witnessed the emergence of a "new" sociology of the professions (Whalley 1991). Inspired by an infusion of neo-Weberian and neo-Marxist thought, researchers

have abandoned trait-based approaches to the study of professions to explicitly focus on the acquisition, exercise, and loss of occupational power.[1] Accordingly, more recent theories of professional work have focused on the processes of professionalization and deprofessionalization. However, despite the substantive shift in focus, investigators continue to employ a referential approach to the study of professions. Specifically, the phenomenon of profession is still conceptualized as an ideal type that closely resembles the construct Wilensky advocated. Today, a "profession" is literally defined as an occupation that possesses a distinctive form of market power derived from monopolizing socially valued expertise and its accompanying autonomy, status, and prestige (see Johnson 1972; Larson 1977; Child and Fulk 1982). And, as Abbott (1988) recently noted, the conceptual tactics of the new sociology of professions remain little changed from those used by its predecessor: researchers continue to study the phenomenon by identifying an occupation which exemplifies the ideal (usually medicine or law) and examining the role played by certain material conditions in the acquisition or loss of power and status (e.g., regarding codes of ethics, see Berlant 1975; regarding credentials, see Larson 1977).

But perhaps adherence to a referential approach is most clearly revealed in the way more recent theories have treated professional "rhetoric," since investigators continue to denounce talk of professionalism as inherently misleading, or at best, simply irrelevant. The justifications offered for this are surprisingly similar to those offered by Wilensky. For example, after a careful examination of professional rhetoric among paraprofessions — that is, occupations which display the trappings of professions but nevertheless lack their power and status — Freidson (1970, 67-68) concluded that talk of professionalism serves merely to inflate members' perceptions of inherently subordinate work. Hence, when examining such occupations, investigators should not mistake these claims for the objective, structural evidence denotive of true professions: autonomy, occupational organization, and licensing. In short, according to Freidson, talk of professionalism found in everyday discourse remains a theoretical liability; to remain useful, therefore, the ideal type of "profession" should continue to hold only those meanings sociologists attribute to it.

To assess both the value and limitations of adopting this approach to the study of "profession," we will call on the distinction between etic and emic analyses of social phenomena. As conventionally defined, "etic" and "emic" are contrastive perspectives on the way social phenomena may be approached and explained. Etics are conceptual strategies which analyze and explain phenomena in terms of the interpretive schemes and categories considered meaningful and appropriate by observers (Harris 1976; Geertz 1983; Lett 1991). Because etic strategies approach phenomena from an abstract, generalizing perspective, etic analysis gravitates towards capturing the material or structural conditions underpinning social behavior (Pelto and Pelto 1978; Harris 1991). In contrast, emics are conceptual strategies which analyze and explain phenomena in terms of the interpretive schemes and categories considered meaningful and appropriate by the people being studied (Harris 1976; Geertz 1983; Lett 1991). At an individual level, emic analysis attempts to understand behavior through the native's frame of reference by exploring how the actor's self perceptions and experiences influence behavior. At a cultural level, emic analysis examines culturally standardized categories of experience, as encoded in language, that can account

for observed consistencies of behavior throughout a community (Watson 1981, 443).

Because etics and emics view phenomena from very different vantage points, each type of analysis tends to produce very different interpretations. Hence, etics and emics can sensitize the researcher to different aspects of a given phenomenon. This does not imply that the strategies are irreconcilable, however. As originally conceived by linguist Kenneth Pike (1954), both views are necessary to form a synthetic, unified approach to studying social phenomena. This assertion is based on the premise that social behavior is determined by both material and socially-constructed aspects of reality.[2] Consequently, social scientists must employ interpretive tools designed to explain both the structural and social determinants of behavior. To illustrate this point, Pike (1954, 41) likened scientific interpretation to binocular vision: when viewing through an etic lens, the analyst inspects a scene in tacit reference to an abstract, generalizing perspective that highlights the structural aspects of social phenomena. But when viewing the same events through an emic lens, structure recedes as the cultural logics that imbue it with meaning spring into focus. Observed separately, each view represents a partial and rather "flat" image of the scene. Only when the views are combined do they jump into three dimensions, taking on a substance and depth of meaning they previously lacked.[3]

In fact, Pike (1954, 40-41) warned that a penalty would accrue to social scientists who failed to ground scientific concepts and theory in both etic and emic understandings of social behavior, because research which privileged one type of analysis would necessarily exclude the other. As a consequence, the theories and concepts formed would represent only a partial and, in Pike's view, inadequate understanding of the phenomena in question. This was especially true for those who employed only etic analysis. Because observers must approach social phenomena not native to their own cultures from an etic perspective, Pike argued that their initial analyses would produce little more than a rough, tentative, and possibly inaccurate description. If observers subsequently amended this draft with emic descriptions drawn from the natives' understandings and interpretations of the phenomena, the resulting analysis could eventually provide a comprehensive and highly accurate description. However, if observers failed to incorporate emic understandings into etic descriptions of behavior, they openly courted the risk of attributing to phenomena meanings that were completely unfounded from the natives' point of view. Hence, Pike concluded, the scientific theories and concepts produced would be inaccurate and inadequate.

By applying the concepts of etic and emic to the sociological theory of professions itself, we can easily see that sociologists have privileged etic over emic analysis. In describing and explaining professionalization, investigators have maintained that "profession" is best understood either by analyzing their own personal knowledge of the subject or by inspecting a self-styled collection of data, rather than by analyzing subjective meanings attributed to the phenomenon by social actors (Dingwall 1976, 332).

Typically, investigators have presumed "profession" to be an occupational form denoted by power, status, and prestige. Their analytical emphasis has been overwhelmingly structural and concerned primarily with explicating the role played by certain material conditions in the acquisition, maintenance, and loss of professional power and status. This approach has proven useful by providing a deep and richly detailed understanding of the material conditions underlying the

phenomenon of profession. For example, we currently know a great deal about how structural attributes such as credentials, licenses, occupational organizations, and codes of ethics function to help occupations achieve and maintain the status that sociologists have defined as "profession" (Abbott 1990). However, this analysis of structure has also resulted in structure being taken as definitive of professionalism, a move which makes the subjective meanings attributed to the term by social actors in everyday discourse theoretically unimportant, if not downright misleading. Consequently, we know practically nothing about what the rhetoric of professionalism actually signifies to those who use it or about the new phenomena that the study of this rhetoric might make available for the sociology of work and occupations. But more importantly, the etic approach also forestalls definitions of "profession" from alternative viewpoints, which begs the question of whether sociological theory of the professions does in fact represent an accurate interpretation of this complex social phenomenon.

We submit that an examination of professionalism from an emic perspective is important for two reasons. First, since emics detail what the concept of "profession" actually signifies to social actors in the context of everyday language, we can employ the resulting analysis to identify any discrepancies between the interpretations offered by sociologists and social actors. Emic analysis therefore represents a resource which can be used to gauge tentatively both the adequacy and accuracy of sociological conceptions of professionalism. Second, by adopting an emic perspective, we establish that professionalism is not only a structural form but also a socially meaningful category used by people to describe and evaluate work. From this point of view, rhetoric about profession is neither irrelevant nor misleading, but instead represents a medium for expressing beliefs, ideas, and values pertaining to work. Consequently, the study of professional rhetoric may make new phenomena available for analysis.

In this paper, we present an emic analysis of professionalism among four technical occupations. This analysis proves particularly instructive because technicians are precisely the sort of workers sociologists have dismissed. As will be seen, technicians readily speak of professionalism when describing their work and work relations, but their subordinate position within professional bureaucracies, or hierarchical work organizations comprised of occupations which exist to support the work of a dominant profession (Mintzberg 1979; Barley 1993), allows them relatively little of the power, prestige, or status considered denotive of "profession." After describing the notions underlying the technicians' talk of professionalism, we will show that, to technical workers, being professional hinges not on their occupations' resemblance to a structural ideal type, but rather on the successful performance and validation of various behaviors which are situationally designated as "professional." Moreover, the content and function of technicians' notions of professionalism have little resemblance to those posited by social scientists, a finding which casts serious doubt on the adequacy and accuracy of sociological conceptions of "profession." Finally, we will use information from this analysis to sketch the implications of emic analysis of professionalism.

Data and Methods

Our study is a product of an ongoing stream of research on the technical labor force, which was initiated in 1990 at a large Northeastern university. This research centered on a series of coordinated ethnographic studies of technical occupations, whose goal was to build a comparative database on the social structure of technical work. Each ethnography consisted of a prolonged field study of one or more technical occupations, which were selected to represent different types of technical work and employment contexts. Although each study was conducted by a different researcher, all were linked by a research design which ensured numerous points of commonality. Methodology provided one such point. In every case, field work was conducted for a period of 6 to 12 months and consisted of both participant observation and unstructured interviews conducted with a variety of subjects. Field notes and recorded materials from each study were reviewed periodically by fellow investigators to ensure a minimum of substantive and descriptive continuity among project members. Although each study was tailored to the contours of the occupation under investigation, a number of common research foci facilitated comparative analysis. These included: the occupation's formal and informal structure; the skills, abilities, and attitudes of occupation members; the ways in which members were trained and socialized; career paths available to occupation members; relations between occupation members and members of other occupations, including management; and most importantly for our study, the ways in which technical workers understood themselves and their work.

In addition to pursuing separate studies, researchers also participated in team meetings, which served as forums for comparing and analyzing commonalities and differences among the occupations under investigation. It was in the context of these meetings that the issue of professionalism among technical workers emerged. In the process of comparing data from the various studies, we noticed that members of four technical occupations regularly used the term "professionalism" and related grammatical forms when describing their work and work relations. The members of these occupations were:

sonographers employed in two large urban hospitals; science technicians employed in a research laboratory located in a large Northeastern university; medical technicians employed in a hospital laboratory; and emergency medical technicians (EMTs) employed in two commercial agencies.[4]

This observation proved intriguing because, according to the standard definitions found in the sociological literature, none of these occupations ostensibly merits the status of profession; that is, none of them possessed all the structural characteristics necessary to closely approximate the sociologically-defined ideal type of "profession." This raised the question of what technicians meant when they spoke of professionalism: Did this talk serve merely as a rhetorical tactic to gain power and status, as sociologists have so often suggested? Or, could it hold alternative meanings and serve other purposes?

To answer this question, we conducted a systematic search of the field notes from each ethnographic study for explicit, emically-based references to professionalism. After excluding excerpts in which the term was introduced into discourse by the ethnographer, we identified numerous instances in which it spontaneously emerged among the technicians. Identifying explicit references represented but a first step towards understanding technicians' references to professionalism, however. Each excerpt was read and iteratively coded to discern ostensible patterns of usage and meaning. Based on this initial examination, it was determined that technicians evoked the term (1) to call attention to acceptable and unacceptable behavior and thus teach or reinforce occupational norms and (2) to call attention to the fact that an occupation member had not been accorded proper respect by an outsider.

The field notes again were consulted and all instances in which technicians made reference to norms or examples of good work behavior, bad work behavior, and displays of disrespect were noted. These references formed the basis of the theoretical categories on which the analysis was subsequently based. After dimensions within each category were defined for describing (1) speakers, (2) situational context, (3) substantive content, and (4) any ostensible motive for discussing the subject, the excerpts were read and iteratively coded once again. This second analysis provided a rich and extensive data set from which we fashioned a series of working hypotheses about the meanings that technical workers attributed to professionalism, and what usage of this term actually signified.

Because ours was a comparative analysis which involved using data collected by researchers other than ourselves, additional steps were needed to confirm our findings. When the processes of data gathering and analysis are conducted by a single ethnographer, findings are validated by the investigator's personal experience with and first-hand knowledge of the subject group(s) (Kirk and Miller 1986; Bryman 1988). However, because we had no interaction with technicians employed in research and hospital laboratories, we had no first-hand knowledge of these occupations. Consequently, our conclusions drawn from this data remained tentative. Also, there are limitations inherent in using another investigator's field notes, simply because one's collective knowledge of one's subjects is rarely, if ever, recorded in its entirety. Much of the knowledge is tacit, and remains locked in memory until some contextual stimulus triggers its release. We therefore sought to validate our findings using a two-step validation process.

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The first step of this process consisted of compiling the excerpts taken from each investigator's field notes and recording a brief interpretation of the substantive content, context, and apparent significance of each incident. The investigators were then asked to review all excerpts drawn from their own field notes during a series of taped interviews with the authors. This format proved valuable because it not only allowed each investigator to either confirm or disconfirm our interpretations of the data, but also because it provided each investigator with an opportunity to sharpen and elaborate our interpretations. In fact, each session quickly assumed the air of an ethnographic interview not unlike one conducted with a subject, because each investigator was questioned to elicit information and insights that were undocumented in the field notes. The transcripts of these taped sessions proved to be an invaluable resource for enriching our interpretations of the data.

After our interpretations of all excerpts had been validated and amended as needed, we formulated a preliminary theoretical framework which described the meanings attributed to professionalism among technical workers. This framework was presented to the research team for comment and verification in the second step of the validation process. Team members were encouraged to point out discrepancies, misinterpretations, and any overlooked examples which could either confirm or disconfirm our findings. This session elicited many suggestions and criticisms, which were subsequently used to revise the framework.

Generally speaking, our analysis revealed that technicians' perceptions of professionalism did indeed differ substantially from those proffered by sociologists, and that professional rhetoric served functions quite unlike those described in the sociological theory of professions. In virtually every case, appeals to professionalism were used either to express ideas about how occupation members should act to perform their work successfully or to identify the mutual obligations that this action entailed. We begin by discussing how talk of professionalism is used by technicians to monitor the work behavior of occupation members. We then examine how appeals to professionalism function to critique the behavior of outsiders.

Professionalism among Technical Workers

Expertise

For sociologists, the core of the phenomenon of profession has been expertise — the command of scarce and socially valued skills and knowledge which permit professions to control the content and context of their work. In fact, recent theories of professional development have portrayed professionalization as nearly synonymous with the construction of a formal, systematic knowledge base and the institutional structures (e.g., credentials, training, licensing, etc.) necessary to administer and protect it (Freidson 1986; Halliday 1988; Abbott 1988, 1990).

We found that expertise also played a pivotal role in technicians' notions of professionalism, but with an important difference. Although credentials and formal training were either mandated or customary for all the occupations studied, professionalism hinged not on formal, theoretical knowledge, but rather on contextual knowledge derived from everyday practice. Without exception, the workers were convinced that their expertise was grounded in practical experience rather than the theory imparted during their education and formal training: "You can't learn sonography out of a book," explained a sonographer. "You have to get your hands on a transducer."[5]

This does not imply that the technicians counted their formal training as irrelevant, however. No technician claimed that the skills and knowledge acquired in school were completely useless. Rather, theoretical knowledge formed a backdrop for the acquisition and development of contextual knowledge. Although a technician skilled in plant pathology acknowledged that he learned the technique of handling bacteria during his first months on the job, he believed the pace at which he acquired this technique was speeded by his basic understanding of mathematics, statistics, biology, and chemistry. He remained convinced, however, that given time and practice, a trainee lacking a similar grounding in theory could develop an equivalent degree of expertise. Similarly, EMTs maintained that much of the knowledge acquired in formal training consisted of "nice to know" information — that is, interesting but

reportedly trivial medical details. Again, this information was never described as being truly irrelevant or unimportant. In fact, some EMTs demonstrated a profound fascination with medical details and prided themselves on their ability to recite them upon demand.

However, even these self-styled trivia experts admitted that the relevance of this knowledge paled in comparison with "need to know" information, or with the contextual skills and knowledge derived from everyday practice. To understand the emphasis placed on contextual knowledge, one must realize that, within the professional division of labor, technicians reside at the empirical interface — the point at which a larger production process and the materials on which the process depends connect (Barley 1993; Barley and Bechky 1993).

The technicians' work involves two complementary processes. On one hand, they are responsible for *transforming* aspects of the material world into symbolic representations which are subsequently used in the work of professionals. For instance, sonographers (Barley 1990), medical technicians (Scarselletta 1992), and EMTs (Nelsen and Barley 1993) distill the information gathered in face-to-face encounters with patients into images, assays, counts, and other forms of data useful in medical diagnosis. Similarly, science technicians employed in a biology laboratory help generate the findings and data used to produce the reports, research papers, and grants written by research scientists. Because technicians transmit transformed empirical data directly to the professionals, the former must be fluent in the language of the latter. Consequently, technicians regularly employ the jargon, inscription practices, and theories of professionals in their work (Barley 1993).

Yet, technicians also do more than generate symbols and information. Most also function as *caretakers* charged with ensuring the welfare of the organisms, machines, or other physical systems in the empirical realm (Barley 1993). Within most professional divisions of labor, technical occupations actually buffer professions from the empirical phenomena over which the latter are reputed to have mastery. Hence, technicians typically preside over encounters with the empirical realm, and much of their work involves shielding professionals from the vagaries of empirical encounters (Barley and Bechky 1993). For example, by making diagnoses and initiating patient care at the site of an accident, EMTs relieve nurses and physicians of the need to do triage (Nelsen and Barley 1993). Similarly, medical technicians in hospital laboratories distance pathologists from encounters with patients and bodily tissues (Scarselletta 1992).

Although transformation and caretaking were both potential sources of technicians' contextual knowledge, the latter function seemed to provide the bulk of that knowledge. Because technicians presided over encounters with the physical world, they developed an intimate understanding of the machines, instruments, and techniques used to monitor and care for their charges and of the vagaries of the empirical phenomena to which they ministered. For instance, sonographers claimed that internal organs vary in their appearance "just like people's noses do." Consequently, they had to be able to recognize organs despite variation, a skill acquired only after much practical experience in imaging physiological structures. Similarly, much of the expertise of laboratory technicians who tended monoclonal cell cultures centered about the knowledge and techniques necessary to keep cantankerous cells "happy," or maintained in the delicate balance of homeostasis which permits manipulation and growth.

In short, much of the technicians' work was a response to the vagaries of machines, materials, and physical systems. Because none of these tools or systems could be counted on to function in a routine or predictable manner, technicians' understandings of them were fragile and variable. The upshot was that their knowledge remained resistant to codification and, on occasion, to articulation (Kusterer 1978; Orr 1991). Hence, technicians' contextual knowledge was embedded in the normative standards of work practice that evolved within each occupation. Of course, because standards defining good and bad work practice coalesced around the particulars of each type of work, they varied considerably across the occupations studied. For example, the practical exigencies of manipulating cell cultures required science technicians to adhere to standards which emphasized vigilance, consistency, and a scrupulous attention to cleanliness and detail (Barley and Bechky 1993). The unpredictable and often dangerous nature of rescue work, on the other hand, dictated that the EMTs' normative code feature standards of flexibility, decisiveness, and personal control (Nelsen and Barley 1993).

One sense in which the occupations did not vary, however, was that being professional implied a deep respect for normative standards of good work practice. In every case, technicians who were described as being "professional" were those who adhered strictly to these norms. Conversely, technicians were quick to condemn colleagues whose work habits were less than exemplary. In these cases, talk of professionalism was used to denigrate offenders before an audience of peers, and thereby reinforce occupational norms. This was observed when a sonographer who was sorting a pile of videotaped records angrily claimed that many of the cassettes had been mislabeled or mistakenly erased. He considered their condition to be indicative of sloppy work habits, and chalked this up to a peer's lack of circumspection and professionalism. A laboratory technician was also overheard condemning the practices of a visitor who displayed a similar lack of regard for her materials:

> Sue talked about a post doc who is working in her lab. . . She thinks he is a big slob, lazy. . . and acting in a completely unprofessional manner. On Friday, he was using some of her cells with her permission. He took them out of the nitrogen, and he was not treating the cells with care. . . . Instead of reaching in and taking out the vial, he took out the entire canister and left it on top of the freezer while he took the cells he needed. Sue was furious and told him never to leave those cells at room temperature. . . . She told him he can treat his own stuff that way, but when using her resources he will do it her way.

The fact that expertise was grounded in contextual knowledge also posed a problem for technicians. Because much of the contextual knowledge used on the job was tacit and normative standards were only vaguely defined, it was often difficult for neophytes to grasp the finer points of good work practice. Talk of professionalism articulated these points by drawing attention to individuals who served as exemplars of either good or bad practice. It was not uncommon to witness instructors in Emergency Medical Service (EMS) classes turn even simple questions or bits of gossip into opportunities for extolling or condemning the work habits of others. For example, after being asked about a recent case in which a crew of EMTs had failed to revive a young child, an instructor seized the opening to offer an impromptu lesson on good work practice at the crew's expense:

> Sharon introduced the story by asking the class to consider what they'd have done in this situation. A call was received for "a child not

breathing" — an infant had seized in the bath and drowned. An ambulance responded immediately, but its crew proceeded to embark on a series of foul-ups that Sharon marked as incompetent. For example, there had been a delay in treatment because none of the EMTs was certified to practice on an infant. Upon discovering that they were unable to provide the care needed, the crew called for a paramedic who arrived several minutes later. Although this conformed to standard medical protocol, Sharon argued that the crew had exercised poor judgment. Since none of the crew members were certified to practice on small children, they should have foreseen the possibility that their patient would be an infant and solicited more information from the dispatcher to see if a paramedic was needed *before* leaving the station. That way, the delay could have been avoided, and the child's death might have been averted. Sharon angrily insisted that this type of performance was inexcusable and summed up the grim tale by warning the group that she must never, ever hear a similar report about any of her students.

Attitude

The second type of behavior targeted by talk of professionalism concerned the technicians' "attitude," the complex of values and beliefs appropriately taken toward one's work. According to technicians, a professional attitude possessed two features. The first was "confidence," or a marked degree of poise and self-assurance. This was most obviously demonstrated in the manner in which workers performed their tasks. Although all technicians agreed that neophytes were expected to display a certain amount of hesitation or self-doubt, this behavior was expected to be replaced gradually with an air of determination as technicians perfected their skills and knowledge. Indeed, it was evident from one EMS instructor's admonishment to his students that EMTs were encouraged to evince this attitude even before they began to practice fully their skills. The instructor told them to demonstrate their proficiency to physicians by adopting a proactive role in the medical encounter: "From now on, when you radio the hospital I want you to *ask* the doctor for (permission to administer) a drug instead of waiting for them to order it. . . . I want you to *intercede* on the patient's behalf."

Although EMTs were not expected to demonstrate the recommended degree of proactivity at first, they were expected visibly to reduce their psychological dependency on the physician's knowledge after gaining a few months of experience. An EMT explained that all trainees were hesitant when they began to practice their skills in the field, and took much comfort in the knowledge that a physician's advice was only a radio call away. However, this reluctance was expected to slip away as the neophyte accumulated a store of contextual knowledge and honed skills in the context of everyday practice. "I was nervous at first," one EMT admitted, "but now, if the hospital responds on the radio with an order that I think is unnecessary. . . . I call the hospital and tell them, 'No, this patient doesn't need that right now'. . . and in most cases, they'll agree."

Less obviously, confidence was manifest in a willingness to deviate from standard procedures in order to learn new techniques, to experiment, and to innovate. In fact, professionalism took the form of an attitude of learning, a career-long commitment to expanding skills and knowledge. The ability to be flexible in performing work, to push continually beyond protocols and rote methods to discover easier, safer, and more efficient ways to complete tasks was highly prized. A science technician in the plant pathology laboratory demonstrated the extent to which some staff developed a

talent for innovation. During his interview, the technician, who was renowned for creative approaches to maintaining asepsis in a laboratory environment, proudly claimed that he had obtained his "sterile degree," or a heightened understanding of the principles and technical requirements of asepsis, entirely on the job. Moreover, he was largely self-taught. His creative approaches to problem solving were the product of a willingness to take machines apart to see how they worked and to tinker with standard equipment, customizing various tools and materials to meet his needs.

Although most innovations were undertaken to improve the ease and quality of assigned work tasks, it was equally important to "push the technology" in order to gain knowledge about aspects of the work indirectly related to, but not formally a part of, one's job, and so acquire skills invaluable for getting work done efficiently. In the hospital laboratory studied, the medical technicians' work was dominated by the Coulter, a machine which performed the bulk of testing in the facility. The technicians' interactions with the machine were relatively circumscribed — limited to loading specimens periodically and retrieving test results from a computer screen. Machine repair was not part of the technicians' assigned duties. Yet, one medical technician had taken steps to unlock the mysteries of this imposing piece of equipment. By carefully taking the machine apart when breakdowns occurred and identifying the source of trouble, the technician created a body of artisanal knowledge about mechanical troubleshooting. The technician proceeded to make detailed notes of his findings, which were subsequently kept in a binder accessible to everyone in the laboratory. This binder became a repository for knowledge of machine technology that allowed technicians to perform relatively simple repairs themselves. Not only did this save time and effort in the event of a breakdown, it also encouraged other technicians to try their hand at machine repair.

As these examples illustrate, technicians considered demonstrating confidence in one's skills and knowledge to be paramount. However, this belief was predicated on the assumption that the practitioner actually possessed the expertise to justify such a display. Whenever they did not possess the skills and/or knowledge necessary to successfully accomplish the task at hand, technicians were fully expected to admit their limitations. This is what technicians referred to when they claimed that a professional ethos precluded "cockiness." In such instances, characteristics such as a willingness to admit mistakes or puzzlement, to ask questions, and to seek the counsel of peers and superiors were not interpreted as personal failings or signs of incompetence. Rather, they were regarded as desirable attributes. Indeed, as professionals, technicians were obliged to admit their ignorance and error, as the following incident from a hospital laboratory illustrates:

> We got on the subject of error in the lab. It was an off-hours error in which a sample of spinal fluid contained lots of cells that were clearly abnormal, but Susan failed to notify the pathologist because she couldn't identify the cells. The issue became complicated because Linda showed the specimen to others on the shift. This upset Susan, who felt that Linda was trying to make her look bad. But Linda insisted she was simply alerting other technicians to a mistake that can happen, noting that, "People get really embarrassed if they don't know something. They don't like to admit that they don't know what something is. But to me that's nothing to be ashamed of. The mistake is not having something reviewed [by the pathologist] if you're not sure what it is."

Possessing a professional attitude implied far more than acknowledging immediate errors. Technicians guarded against hubris by maintaining a constant awareness of personal fallibility, which, for the most part, meant entertaining the ghosts of mistakes long past. Even extremely skilled workers whose expertise rarely admitted mistakes were expected to sustain what might be described as a humble attitude in light of past error. For example, a laboratory technician whose skill was exemplary nevertheless counseled, "A lot of people say to me, 'you really know a lot of tricks of the trade.' This may be true, but I've also made a lot of mistakes, and I always admit them, because that's where I've gained my knowledge. People prefer to hear someone say that they messed up and don't know something rather than pretend they do."

Although this mix of confidence and humility might seem an odd combination, we suggest that it is actually quite understandable. Among technicians, innovation in everyday work practices was an important means of expanding their base of contextual knowledge and, hence, their expertise. And under these circumstances, an attitude of learning would be vital if contextual knowledge were to flower and develop to its fullest. Those lacking confidence in their abilities, or demonstrating an unwillingness to innovate, contribute little to the knowledge base and hence represent a burden rather than an asset. Similarly, technicians who were unable to admit their ignorance because they were too "cocky" or "proud" to ask questions, were less able to break the chains of habit and tradition, a necessary precursor to the riskier, but potentially rewarding, processes of innovation and experimentation. These individuals also contributed little to the occupations' store of contextual knowledge. Hence, this behavior represents not only a liability to the occupation, but also a flagrant disregard of occupational norms and obligations, and as such was roundly condemned by technicians as being unprofessional.

Presentation

Whereas aspects of professionalism regarding praxis and attitude were often subtle, matters pertaining to presentation were pointedly obvious — and intentionally so. Technicians were keenly aware that how they presented themselves played an important part in determining how their work was perceived by others. Hence, they were adamant about maintaining appearances which encouraged favorable impressions among salient audiences. An important part of being professional was projecting an image that communicated an overall message of competence. This was accomplished by managing the details of presentation. One EMT summed this up nicely when he insisted, "You always have to look professional and act professional, because you're always being watched by somebody!"

Among technicians, "looking professional" referred to norms of dress. Not surprisingly, these varied in accordance with the dictates of the work and work contexts experienced by the occupations studied. Whereas sonographers, laboratory technicians, and medical technicians donned crisp white lab coats over casual business dress, EMTs wore severe, combat-style uniforms with jump boots, heavy leather belts slung with holstered radios, and, on occasion, bullet-proof vests. But despite these obvious differences, technicians did not vary in their insistence that maintaining one's physical appearance was an important part of being professional. Indeed, during his study of medical technicians, Scarselletta became personally aware of the importance of adhering to norms of dress when he was admonished for wearing blue jeans to the observation site. After

being pulled discreetly aside, he was advised that "We have a dress code here, and that means no jeans. You see, it's because we're professionals. . . . The patients see us, the doctors see us, so we want to dress like professionals. Since you're one of us now, we'd appreciate it if you adhered to the code."

"Acting professional" also referred to the personal demeanor adopted in a technician's interactions with others, particularly those outside the occupation. The face presented to outsiders often contrasted sharply with that shown to peers. For instance, it was not uncommon for technicians to engage enthusiastically in horseplay during moments of respite, when exchanges would be heavily punctuated by joking, profanity, and sexual innuendo. But while such behavior was considered appropriate within an intraoccupational context, it was decidedly inappropriate in the presence of outsiders.

This was readily detected in norms of speech. Exchanges with outsiders were heavily studded with technical terminology. The reason for this was partly pragmatic. Because technicians are required to translate the information drawn from their manipulations of empirical phenomena into symbolic representations, technical terminology and jargon formed an extremely efficient code for sharing data with supervising professionals and members of other allied occupations. That it was also an integral part of maintaining a professional image was indicated by the fact that exchanges with outsiders were carefully monitored to avoid communicating messages which detracted from the technicians' air of competence. This was evident in a case where an EMT, while on the scene of an emergency, neglected to check his inclination to use colloquialisms. When asked by a partner to report a patient's weight, the paramedic jokingly answered that he didn't "guess weights like they do at the circus." This comment incensed family members standing nearby, who demanded that the paramedic apologize for calling their mother a "circus animal." To the EMT who related this tale, the embarrassment of the paramedic and the ridicule he later received from peers served as an important lesson on the importance of monitoring one's speech: "You have to be on your best behavior on the street, watch your language and mind what you say. Foul mouths and street language aren't acceptable, nor are comments that might be interpreted as unflattering. Not only is it unprofessional, it can also get you into a lot of hot water."

The paramedic's predicament in the incident related above also illustrates that being professional required evincing a demeanor which quietly evoked the technician's competence. This required that interactions with outsiders be conducted with a considerable degree of circumspection and emotional reserve. When interacting with clients or patients, technicians remained concerned yet somewhat aloof, avoiding obvious displays of excitement or emotion. In fact, EMTs considered their ability to retain a calm and restrained demeanor in the face of unruly crowds, bloody trauma, and violent death to be a vital means of asserting their authority on emergency scenes. Likewise, sonographers insisted that maintaining a sense of decorum during examinations was not only essential for securing the information and cooperation necessary for successful imaging, it was also invaluable in defusing emotionally-charged situations. This was evident during a session in which imaging revealed that a fetus had died within the womb. The mother, already suspecting this result, became panicky and pressed the technician for more information. When asked about how he handled the situation, the sonographer replied, "The woman was already quite anxious

when she came in. I greeted her. . . well, not somberly, but professionally, and afterwards I tried to talk to her about anything to get her mind off of it." By maintaining a mask of cool efficiency and emotional detachment throughout the procedure, the technician attempted both to calm the patient and to avoid divulging any information which might confirm her fears, since relaying diagnoses was a task that technicians gratefully left to physicians.

Interactions with superiors also required technicians to assume a professional demeanor, but a more subtle one. Although it was essential that their demeanor exude competence, technicians also had to remain ever mindful of the parties' respective roles in the professional division of labor. Balancing this seemingly antithetical mix of behaviors, simultaneously appearing both confident and humble, was an often difficult task. Indeed, newly-trained sonographers claimed that learning to assume a posture that communicated both technical competence and humility was one of the most difficult aspects of the job to learn: "The thing that makes me nervous is to scan a patient and then tell the radiologist what you think you see. You have to know what you're doing without coming across like you think you're a doctor." This was accomplished by adopting a demeanor which was quietly respectful but undeniably proactive. For example, although they were not formally allowed to offer diagnoses, sonographers learned to subtly "suggest" to radiologists that anomalies appeared in ultrasound images. This usually took the form of offhand comments made while relaying an image to the physician for diagnosis, which one technician described as simply adding, "This one has a nice set of gallstones," when handing over a film. Not only did this tactic alert the physician to the fact that the sonographer had already detected the anomaly, it also avoided any obvious challenge to the physician's competence.

The technicians' talk of professionalism, then, concerned three issues underpinning notions of good and bad practice: issues of expertise, attitude, and presentation. Based on this observation, we contend that, in making an appeal to "professionalism," workers were commenting on how one performed a work role. Hence, among technical workers, professionalism is an evaluative criterion used (1) to articulate implicit notions of how occupational members should enact assigned work roles, and (2) to detail the responsibilities entailed by role incumbents. In other words, simply performing one's job was not enough; as professionals, the technicians believed they had a duty to enact their assigned roles in a manner consistent with normative standards of expertise, attitude, and presentation, all of which combined to communicate an overall message of expertise.

In practice, being professional gave technicians the interactional footing necessary to assert their competence among outside audiences. Among clients or patients, this was used to gain a measure of control and compliance that otherwise might not have been forthcoming. For example, an EMT explained that reluctant patients could be persuaded to cooperate by marshaling one's professionalism to project an image of medical expertise:

> Sometimes we get middle-aged business types who think they know more than you. They'll be having a heart attack and still refuse to go to the ER. But if you act professional, you won't have any trouble. I start by asking about their business. . . . Then I say, "Look, you got where you are today by being aggressive. Well, I got to where I am the very same way and I know what I'm talking about. So, trust me. . . . If you

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> don't have your chest pains checked out, we're going to be back here in a couple of hours. . . but by then you'll be in much worse shape and there may not be anything we can do to help you."

Professionalism also allowed technicians to gain a measure of autonomy in the professional division of labor. Relative to the professionals for whom they worked, the technicians' work roles were relatively circumscribed. Of course, this varied considerably across the occupations studied. Medical technicians were perhaps the least autonomous, being referred to as mere "button-pushers," or functionaries, by at least one pathologist, while laboratory technicians enjoyed a much larger degree of freedom by working unsupervised for days at a time. Yet, even these technicians remained answerable to the scientists who supervised them.

However, in the context of everyday work activities, supervisors typically allowed technicians who adhered to norms of professionalism a considerable degree of autonomy and discretion in how work was performed. For example, EMTs explained that, after repeated demonstrations of technical competence and proper attitude, physicians came to "trust their assessments" and routinely grant requests for medication and treatments without question. The effects were even more dramatic among sonographers. After technicians proved their reliability and expertise on multiple occasions, radiologists seemed to discount differences of formal status and developed working relationships with sonographers which were almost collegial. Thus, it was not unusual to witness an experienced sonographer and a radiologist bending over an ultrasound monitor as they quietly debated the interpretation of a particular image. One scientist who employed laboratory technicians actually claimed that a good laboratory could be ruined if the technicians were supervised too closely, because truly proficient technicians would resent the interference and quit.

Thus, after repeated demonstrations of competence, professionals would eventually come to trust and rely on the technicians' expertise in matters pertaining to work located at the empirical interface, and formal status differences between superiors and subordinates were temporarily suspended to some degree. But no matter how pervasive it was in practice, the technicians' autonomy remained tentative and situational, occurring only within the privacy of the superior-subordinate relationship. Formal differences of status and power remained unchanged, and technicians continued to be formally answerable to the professionals who supervised them. Hence, this autonomy could be revoked at any time for virtually any reason. Similarly, clients and patients could simply refuse to accept the technicians' assertions of competence. When this occurred, "professionalism" appeared once again, but for a very different reason.

Validation of Role

In addition to being used to comment on how one performed a work role, talk of professionalism was used to specify how others, particularly non-members, should respond to and validate successfully enacted work roles. Outsiders who recognized the implied competence of this performance and acted accordingly were pronounced "professional." However, the term was more commonly invoked whenever technicians believed they had not received recognition for the successful performance of their work roles. Especially targeted for comment was outsider behavior that betrayed a lack of respect for the workers' technical expertise.

Displays of disrespect could be painfully direct, as when outsiders openly refused to acknowledge a technician's expertise in the work at hand. An example occurred in the hospital laboratory when a physician falsely accused a medical technician of reporting incorrect test results. When asked why he later was devoting an extraordinary degree of attention and care to what was normally a routine procedure, the technician explained that a physician had rejected the findings of a previous analysis and had claimed a case of laboratory error. "When this initially happened," he grumbled, "the doctor looked at the results and actually called down here and said, 'You're full of shit. Where's the real result?' He was all over me like a cheap suit, which I thought was real unprofessional. So now I want to be sure that I've done everything possible to show that the results were right." In this case, the technician was stung, partially by the ferocity of the physician's attack, but also by his intimation that the technician would allow such an error to slip by undetected. Because the accusation violated a norm of trust and mutual respect that the technician had carefully established with the physician by repeatedly displaying competence and good judgment, the physician's behavior was tagged as unprofessional.

Technicians were equally sensitive to behavior that seemed to depreciate their contribution to the overall work process. Because the occupations studied were embedded in a professional division of labor, technicians represented only some of many allied occupations

whose members worked closely together to achieve desired goals. Thus, medical technicians and sonographers collaborated with physicians, nurses, and other health care personnel to treat patients; EMTs labored beside physicians, police, and fire fighters during rescues; and laboratory technicians consulted with scientists, graduate students, and members of other technical specialties in the course of conducting research. Although technicians were fully aware that they represented only one piece in this occupational mosaic, they were adamant about having their contribution to the work process recognized. Any behavior that seemed to deny this recognition was denounced as unprofessional. For example, the emergency room staff at one hospital was notorious for refusing to grant EMTs' requests for medications and treatments en route to the hospital or to share information about the eventual outcome of cases. EMTs interpreted these practices as attempts to reduce their role to that of a "fucking ambulance driver."

But technical expertise could also be slighted in a far subtler manner. For example, the modest salaries received by the workers studied were a constant source of irritation, and the technicians complained bitterly and often about the inadequacy of their remuneration. However, when criticizing their pay, workers objected not simply because it was hard to make ends meet or because their salaries were low relative to other occupations, but rather because technicians believed their pay to be incommensurate with the technical skill and knowledge they brought to bear on their work. One EMT explained:

> You know, we consider ourselves professional, like doctors and nurses, but no one else does. But we have all this schooling. . . . We have to know pharmacology, how to titrate drugs. Yet, nobody considers us to be professional because our pay is so low. It just isn't compatible with our training and skills.

In other words, because technicians believed their pay should reflect their contribution to the work process and not their relatively low status within the professional division of labor, modest salaries were perceived as a symbolic lack of respect, a reminder that recognition of technical expertise and the autonomy it earned were conditional at best.

Discussion

It would be easy to interpret the forgoing remarks, as so many sociologists have previously done, as reflecting technicians' desire for increased occupational power and status. Yet, our observations militate against such a conclusion. In depicting talk of professionalism as political rhetoric, social scientists have assumed it is only a weapon used by occupations seeking to monopolize a domain of socially valued work. Would-be professions also acquire many of the structural trappings of profession: credentials, licenses, occupational organizations, codes of ethics. Rhetoric and structural trappings presumably are deployed together to convince salient audiences that an occupation does indeed merit professional status. For occupations embedded in an existing professional division of labor, this implies wresting a work jurisdiction away from occupations currently controlling the domain of work (Abbott 1988).

But technicians seemed to have little interest in political action conducted at an occupational level. For example, although a national association of emergency medical personnel did exist, exceedingly few EMTs belonged to the organization or expressed interest in eventually becoming members, and virtually none of the EMTs interviewed expressed an awareness of its

official code of ethics. Similarly, citing the impracticality of much of the formal education and training currently required to achieve certification, many medical technicians were actually supportive of legislation which would *decrease* the educational requirements for becoming a technician, a move which would seem to hamper public bids for professionalization (Scarselletta 1992). And although some laboratory technicians and sonographers regularly attended professional meetings and conferences, they insisted that their attendance was spurred by a desire to expand their knowledge and skills rather than occupational power or status.

On a more personal level, the technicians demonstrated a similar disinterest in usurping the authority of the professionals for whom they worked. Generally speaking, they expressed little desire to possess their supervisor's jobs or the responsibilities they entailed. In fact, providing that their expertise and contribution to the work process were respected, technical workers openly supported the status quo. For example, although sonographers recognized that a proficient technician "diagnosed" conditions during the course of an examination, they did not wish to assume fully the responsibility for diagnostic chores. As one experienced sonographer explained, "I don't think it's right for a sonographer to take the studies in at the end of the day and put them on the radiologist's desk and say here's this and here's that. It's too easy to miss something. I know, I did a study last week and I didn't see a stone until I had the films in the radiologist's office." Thus, although much of the technician's work represented a duplication and even an enhancement of the radiologist's skills and knowledge — a fact which could conceivably serve as springboard for political action — the technician argued for a collaborative effort between himself and the radiologist. In short, talk of professionalism among technicians did not serve as a vehicle for expressing a political agenda.

However, this leaves open the possibility that the technicians' talk of professionalism served simply as a palliative, a means of artificially inflating the status of subordinate work. The conditions of employment among the occupations studied would certainly seem to support this conclusion. Without exception, all were subordinates within divisions of labor dominated by long-established professions: sonographers, medical technicians, and emergency medical technicians worked under the direction of physicians, while laboratory technicians were supervised by research scientists. Given the status and cultural legitimacy currently afforded the professions, it seemed unlikely that the technical occupations in question would be in a position to mount successfully a challenge to either profession in the near future. Hence, one could easily interpret the technicians' behavior as an elaborate attempt to soothe the sting of subordinacy.

But again, little evidence was found to support this conclusion. As previously noted, technicians were always mindful of their subordinate status within the professional division of labor, but they generally seemed untroubled by this fact. Indeed, as long as their expertise and contribution to the work process was situationally acknowledged, technicians readily accepted their subordinate position. This was observed after a physician refused an EMT's request to administer narcotics while en route to the hospital. The EMT, who was exceedingly skilled but newly hired, interpreted this refusal as an insulting lack of respect and consequently began to denigrate the physician's judgment. However, the EMT's partner curtly informed him that the physician's refusal was entirely proper. Because the EMT was new to the area, he had not yet demonstrated his

competence to the physician. Hence, the physician had acted correctly by not granting his request for the powerful medications. As a remedy, the EMT's partner counseled both diligence and patience: "Once they get to know you, the doctors will begin to trust you and give you drug orders. . . . Until then, we do what we're told to do."

As the foregoing incident illustrates, the technicians did not begrudge professionals their formal authority, nor did they expect to be granted situational autonomy without cause. Rather, they seemed content with the implicit bargain struck with the professionals for whom they worked, which granted the technician situational autonomy and respect but left formal differences of power and status unchallenged. Based on this observation, we suggest the sociological assumption that the rhetoric of professionalism denotes nothing more than a craving for status and power seems unfounded.

In light of the observation that talk of professionalism among technicians implies consciousness of a work role, we suggest another interpretation. It may be that both calling attention to role behavior and making claims about how roles are validated establishes the existence of the occupation as an entity which performs a valuable task. In other words, everyday talk about professionalism is used to make claims about the legitimacy of the occupation's contribution to the overall work process, and about the recognition and respect that this contribution deserves. We contend that the rhetoric of professionalism does not concern power; rather, it concerns respect. Moreover, we suggest that the increasing importance placed on respect or mutual recognition of expertise is indicative of a shift towards horizontalism in the professional division of labor.

It is widely recognized that factors such as organizational downsizing, outsourcing, the specialization of knowledge, and the growth of technology are combining to flatten the vertical divisions of labor embedded in traditional hierarchies into occupational or horizontal divisions of labor. In these structures, production is carried out through open collaboration among occupational communities of practice (Barley 1991, 1993). Hierarchies in professional divisions of labor are no exception. Although professional hierarchies are supposedly organized according to different logics (Freidson 1973), they are nevertheless arrayed as vertical structures not unlike those found in organizational bureaucracies. The viability of these structures is predicated on the assumption that superiors exercise authority legitimately because their technical knowledge encompasses that of their subordinates. But the growing importance of contextualized expertise renders this assumption tenuous. Because they had an intimate knowledge of the materials, techniques, and empirical phenomena employed in the work process, it was not unusual for technicians to possess a much deeper knowledge of the details of work practice than the physicians or scientists for whom they worked. Hence, superiors could not legitimately exercise authority based solely on differences of formal rank or office since, in this setting, expertise was the only currency of value, and differences of status and authority were considered valid only insofar as they reflected substantive differences of expertise.

Consequently, it is entirely reasonable to expect talk of professionalism to reflect a concern for recognition of expertise rather than power. In a horizontal division of labor, professionalism implies certain obligations. To maintain and augment expertise, occupation members must perform their work roles in an exemplary manner, ever mindful of the duties and obligations their roles entail. In turn, they expect that successfully enacted

roles will be validated by various audiences. Among clients or patients of the technicians we studied, validation was signaled by compliance with the technician's directives. Among supervising physicians or scientists, validation took the form of deferring to technicians' judgment in matters in which technicians were clearly expert. In fact, when problems falling within the technicians' realm of expertise arose, superiors were expected to set aside formal differences of status and authority and collaborate as equals in the interest of solving the problem. The effect was to spin a web of collegial relations which allowed work to be performed in a more efficient and harmonious manner. It was only when power was wielded through the chain of command without concern for the technicians' substantive expertise that this seamless web of relations — and the "trust" it inspired — seemed seriously threatened. Thus, one could posit that, in an increasingly horizontal division of labor, power represents an impedance, a relic of interoccupational relations more characteristic of the industrial, rather than the post-industrial, age.

Conclusions

In this paper, we have reviewed the concepts of etic and emic, two contrastive approaches to the interpretation of social phenomena. Succinctly put, etics are conceptual strategies that adopt the observer's point of view, whereas emics are conceptual strategies that adopt the native's point of view. The vantage point from which we approach phenomena is a critical factor in determining how we perceive and interpret them. Given that observers and natives may possess different motives, philosophies, and values, there is little reason to assume they will necessarily attribute the same significance to social phenomena.

Our analysis of the rhetoric of professionalism supports this assumption. Sociologists have traditionally employed an etic approach to studying "profession," a view which stresses the material or structural aspects of social phenomena. "Profession" has been defined as a form of occupational power denoted by status and prestige, and analysis has proceeded by detailing the presence and function of various structural attributes which are believed to be central to the acquisition, maintenance, and loss of this power. From this point of view, talk of professionalism occurring in the absence of power and its structural supports is indicative of little more than an unfounded bid for public attention aimed at improving one's occupational status.

However, our examination revealed that technicians' talk of professionalism did not reflect a concern for power or status, but rather an insistence that their expertise and contribution to the work process be respected within the professional division of labor. To technical workers, professionalism was an evaluative criterion used to articulate implicit notions of (1) how occupation members should enact work roles and (2) how work roles should be properly validated by nonmembers. Hence, being professional was a function of respecting the mutual obligations tendered by one's role within the division of labor instead of monopolizing scarce and socially valued skills and knowledge. As a result, the structural supports implicated in the acquisition and maintenance of professional status were deemed fairly unimportant.

We therefore conclude that substantial discrepancies do in fact exist between etic and emic interpretations of professional rhetoric. Because the sociologists' structure-oriented view has deflected attention away from what professionalism is to social actors themselves and towards what professionalism ought to be as judged

according to external standards, scientific interpretations of professional rhetoric clearly have become divorced from the meanings and intent technical workers give to this talk. This observation strongly suggests that our etically based conceptions of "profession" do present a partial and, at least in the case of professional rhetoric, inaccurate understanding of this social phenomenon. It also speaks to the need to recognize "profession" as socially constructed — that is, determined by structure and social action — and to employ analytical methods to capture both aspects of this complex social phenomenon.

To be sure, the adoption of a synthetic, etic/emic approach towards professionalism represents a host of challenges to existing etic notions of the phenomenon. Most obviously, the incorporation of emics into analysis implies that even basic assumptions underwriting sociological conceptions of professionalism should be subjected to critical examination and, in the event of discrepancies, revised. Although the foregoing analysis suggests that this might occasion a substantial rewriting of theory, the appearance of interpretive differences also identifies new avenues of inquiry. Moreover, an etic/emic approach undermines the assumption that "profession" can be meaningfully understood by focusing only on structural underpinnings embodied in an ideal type. Hence, the practice of conceptualizing "profession" by identifying an occupation presumed to approximate the ideal and detailing its characteristics and experiences without recourse to emic understanding can no longer be defended. But perhaps the most significant challenge posed by synthetic analysis can be found in the roles it casts for investigators and subjects. In synthetic, etic/emic analysis, investigators can no longer act as arbiters of social reality; rather, they should act as collaborators in the interpretive experience.

Incorporating emic and etic analysis also presents us with opportunities. Most notably, casting "profession" as a socially meaningful category permits us to study professionalism as reflected in language without recourse to a structural ideal type. This is important because, in retrospect, it seems that Foote and his colleagues may have been correct after all: while it is true that not all work has become professional, many types of workers now evoke professionalism when describing their work and work relations. Just as Foote predicted in 1953, this ideological shift appears to be implicated in horizontalism or the establishment of increasingly collaborative work relations based on differences of substantive expertise rather than formal authority. However, these shifts are not currently reflected in the structural organization of work within the professional bureaucracy. The professional division of labor remains ostensibly governed by dominant professions and, at least in the case of technical workers, the occupations which embrace the new-found ideology of professionalism do not satisfy standard etic definitions of a profession. Thus, talk of professionalism remains the only indicator that changes are occurring. If we are to understand the shift towards horizontalism and its implications for work and work organizations, we must adopt interpretive strategies designed to examine this talk. Failure to do so will simply perpetuate the theoretical lacunae that already surround the issue.

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Endnotes

[1] A number of factors contributed to the demise of trait-based approaches to the study of professions. First, it was charged that investigators seemed to settle on a set of criteria capable of unequivocally defining "profession," and that even the handful of traits typically considered denotive were not unique to that occupational form (see Roth 1974; Klegon 1978). Hence, the sociological concept of profession was exceedingly brittle. Second, because trait-based approaches seldom employed an explicit theoretical framework in analysis, the theories produced were vague and had scant predictive value (Johnson 1972). And finally, since the trait-based approach to "profession" tended to portray professional occupations at equilibrium, it failed to capture the increasingly popular notion that occupations evolved and, potentially, devolved (Berlant 1975; Larson 1977).

[2] A few sociologists have always adopted a more emic perspective by grounding analysis of professions in the experiences and understandings of occupation members. For example, see Becker et al. 1961; Habenstein 1962. More recently, see Whalley 1991; Kunda 1992; Zabusky 1993. However, it is important to note that these studies have tended to focus on occupations which bear a close resemblance to the structural ideal type — medicine, engineering, and so on. To our knowledge, the only emic study of professionalism conducted among occupations which do not resemble the ideal type is Dingwall's (1976) study of British public health visitors.

[3] That reality is socially constructed is also a central theme in sociological theory. Such a view assumes that social structures are created and re-created by the behavior of social actors. Hence, actors are at once the products and the producers of social reality. See Weber 1949; Berger and Luckmann 1966; Giddens 1977.

[4] Of course, this does not imply that one cannot emphasize either structure or subjective meanings in analysis, but merely requires that the investigator remain sensitive to both aspects of social behavior when framing theory and concepts.

[5] For a more detailed description of the sites and methods used for each study, see Barley 1986 (sonographers), Barley and Bechky 1993 (laboratory technicians), Scarselletta 1992 (medical technicians), and Nelsen and Barley 1993 (emergency medical technicians).

[6] All quotations are taken from researchers' original field notes.

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